Patent

Attorney Docket: 241/172

<u>REMARKS</u>

I hereby state that the content of the paper and computer readable copies of the Sequence Listing, submitted in accordance with 37 C.F.R. §§1.821(e), (f) and (g), or §§1.825(d) and (b), respectively, are the same, and that the attached sequence listing and computer readable form copy contain no new matter. A copy of the "Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures" is also enclosed.

Applicant does not believe there are any fees required for the submission of this sequence listing. However, the Commissioner is authorized to charge Lyon & Lyon's Deposit Account No. 12-2475 for any fees required and to credit any overpayments to said Deposit Account 12-2475.

Respectfully submitted,

LYON & LYON LLP

Dated: August 9, 2001

633 West Fifth Street, Suite 4700 Los Angeles, California 90071-2066 (213) 489-1600 By: 1/10

Patrick S. Eagleman

Reg. No. 44,665

ILLUSTRATIONS

Tryptamine furanosyl nucleoside (RNA)

Tryptamine pyranosyl nucleoside (p-RNA)

Tryptophan (Amino Acid)





UNITED STATE, JEPARTMENT OF COMMERCE **United States Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

FIRST NAMED INVENTOR FILING DATE ATTORNEY DOCKET NO. APPLICATION NO. 14 241/172 58/13/99 RELLER 99/374.8.8

022249 LYON & LYON LLP 633 WEST FIFTH STREET SUITE 4700 LOS ANGELES CA 90071

HM12/1001

EXAMINER

PRASTHORER, 1

ART UNIT PAPER NUMBER

1627

10/01/01

DATE MAILED:

and/or attached an Office communication concerning this application or proceeding.

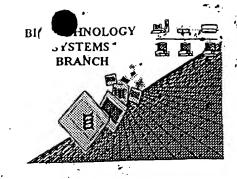
Commissioner of Patents and Trad marks

RECEIVED OCT 0 4 2001 U.S. PROSECUTION

| | Application No. | Applicant(s) |
|--|--|--|
| | | |
| Notice of Abandonment | 09/374,338 Examiner | HELLER ET AL. |
| | | |
| | Thomas W Prasthofer | 1627 |
| The MAILING DATE of this communication | appears on the cover sheet with | the correspondence address |
| This application is abandoned in view of: 1. ☑ Applicant's failure to timely file a proper reply to the 0 (a) ☐ A reply was received on (with a Certificate period for reply (including a total extension of time | of Mailing or Transmission dated |), which is after the expiration of the |
| (b) ☐ A proposed reply was received on, but it d | oes not constitute a proper reply u | nder 37 CRF 1.113 (a) to the final rejection. |
| (A proper reply under 37 CRF 1.113 to a final rejection in condition for allowance; (2) a timely Continued Examination (RCE) in compliance with | filed Notice of Appeal (with appea | filed amendment which places the I fee); or (3) a timely filed Request for |
| (c) ☐ No reply has been received. | | |
| Applicant's failure to timely pay the required issue fe from the mailing date of the Notice of Allowance (PT (a) | OL-85). was received on (with a (| . • |
| (b) The submitted fee of \$ is insufficient. A ba | lance of \$ is due. | u · |
| The issue fee required by 37 CFR 1.18 is \$ | The publication fee, if required | by 37 CFR 1.18(d), is \$ |
| (c) \square The issue fee and publication fee, if applicable, h | as not been received. | |
| Applicant's failure to timely file new formal drawings at Allowability (PTO-37). | as required by, and within the three | e-month period set in, the Notice of |
| (a) Proposed new formal drawings were received on after the expiration of the period for reply. | (with a Certificate of Mailin | g or Transmission dated), which is |
| (b) \square The proposed new formal drawings filed on $___$ | _ are not acceptable and the perio | d for reply has expired. |
| (c) \(\sum \) No proposed new formal drawings have been rec | eived. | |
| 4. The letter of express abandonment which is signed the applicants. | by the attorney or agent of record, | the assignee of the entire interest, or all of |
| The letter of express abandonment which is signed 1.34(a)) upon the filing of a continuing application. | by an attorney or agent (acting in a | representative capacity under 37 CFR |
| The decision by the Board of Patent Appeals and Into of the decision has expired and there are no allowed | | because the period for seeking court review |
| 7. 🔀 The reason(s) below: | | |
| Applicant's response to the comunication maile rules) did not comply with the sequence rules, 1.821(g). A copy of the sequenc elisting error in the sequence of the sequence o | 37 C.F.R. 1.136. The application of the properties attached. DR. J. SUPERVI | e attempt to comply with the sequence on is abaridoned under 37 C.F.R. COTHISMA VENKAT PH.D SURY PATENT EXAMINER HOLOGY CENTER 1600 |
| | | |

U.S. Patent and Trademark Office PTO-1432 (Rev. 9-00) T. PRASTI SFER

RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/37433813Source: 05/EDate Processed by STIC: 08/23/200/E

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address: http://www.uspto.gov/web/offices/pac/checker

| ERROR DETECTED | SUGGESTED CORRECTION SERIAL NUMBER: <u>C9/374338</u> | |
|-------------------------------------|---|---------|
| ATTN: NEW RULES CASES | S: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SO | OFTWARE |
| 1Wrapped Nucleics Wrapped Aminos | The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping." | |
| 2Invalid Line Length | The rules require that a line not exceed 72 characters in length. This includes white spaces. | |
| 3Misaligned Amino Numbering | The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead. | |
| 4Non-ASCII | The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text. | |
| 5Variable Length. | Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing. | |
| 6PatentIn 2.0 "bug" | A "bug" in Patentin version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, Patentin would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences. | |
| 7Skipped Sequences (OLD RULES) | Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped | |
| | Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to Include the skipped sequences. | |
| 8Skipped Sequences (NEW RULES) | Sequence(s) missing. If Intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000 | |
| 9Use of n's or Xaa's (NEW RULES) | Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents. | |
| 10Invalid <213> Response | Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence | |
| 11Use of <220> | Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules) | |
| Patentin 2.0 "bug" | Please do not use "Copy to Disk" function of Patentin version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk. | - |
| 13Misuse of n | in can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide. | |

AMC/MH - Biotechnology Systems Branch - 08/21/2001

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

DATE: 08/23/2001

TIME: 13:24:31 PATENT APPLICATION: US/09/374,338B Input Set : A:\ES.txt Output Set: N:\CRF3\08162001\I374338B.raw <110> APPLICANT: Heller, Michael J. Windhab, Norbert **Does Not Comply** Anderson, Richard R. Corrected Diskette Needed Ackley, Donald E. Nova, Tina S. Hoppe, Hans-Ullrich Hamon, Christian 11 <120> TITLE OF INVENTION: MICROELECTRONIC MOLECULAR DESCRIPTOR ARRAY DEVICES, METHODS, PROCEDURES, AND FORMATS FOR COMBINATORIAL SELECTION OF INTERMOLECULAR LIGAND BINDING 12 13 STRUCTURES AND FOR DRUG SCREENING 15 <130> FILE REFERENCE: Patrick Eagleman: Nanogen 241/172 17 <140> CURRENT APPLICATION NUMBER: 09/374,338B 18 <141> CURRENT FILING DATE: 1999-08-13 20 <160> NUMBER OF SEQ ID NOS: 31 22 <170> SOFTWARE: PatentIn version 3.0 24 <210> SEQ ID NO: 1 25 <211> LENGTH: 7 26 <212> TYPE: DNA 27 <213> ORGANISM: Artificial Sequence 29 <220> FEATURE: 30 <223> OTHER INFORMATION: Synthetic test construct 32 <220> FEATURE: 33 <221> NAME/KEY: modified_base 34 <222> LOCATION: (1)..(7) 35 <223> OTHER INFORMATION: Entire sequence is Pyranosyl RNA 38 <220> FEATURE: 39 <221> NAME/KEY: modified_base 41 <223> OTHER INFORMATION: Base 1 is tryptamine

44 <220> FEATURE:

45 <221> NAME/KEY: modified_base

46 <222> LOCATION: (7)...(7)

47 <223> OTHER INFORMATION: Base 7 is modified with Texas Red

50 <400> SEQUENCE: 1 FYI - tryptamine H -> 51 ngaaggg amino acid or protein 54 <210> SEQ ID NO: 2 55 <211> LENGTH: 14 56 <212> TYPE: DNA 57 <213> ORGANISM: Artificial Sequence 59 <220> FEATURE: 60 <223> OTHER INFORMATION: Synthetic test construct 62 <220> FEATURE: 63 <221> NAME/KEY: modified_base 64 <222> LOCATION: (1)..(14) 65 <223> OTHER INFORMATION: Entire sequence is Pyranosyl The type of errors shown exist throughout

RAW SEQUENCE LISTING

the Sequence Listing. Please check subsequent

sequences for similar errors.

69 <221> NAME/KEY: modified_base

68 <220> FEATURE:

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/374,338B

DATE: 08/23/2001 TIME: 13:24:31

Input Set : A:\ES.txt

Output Set: N:\CRF3\08162001\I374338B.raw

```
70 <222> LOCATION: (1)..(1)
     71 <223> OTHER INFORMATION: Base 1 is modified with Biotin
     .74 <220> FEATURE:
     75 <221> NAME/KEY: modified base
                                                            n can only represent a single muchotide base at
     76 <222> LOCATION: ((8)..(8))
     77 <223> OTHER INFORMATION: Base 8 is tryptamine
     80 <400> SEQUENCE: 2
                                                                   single location.
 --> 81 cccttctncc cccg
     84 <210> SEQ ID NO: 3
     85 <211> LENGTH: 7
     86 <212> TYPE: DNA
     87 <213> ORGANISM: Artificial Sequence
     89 <220> FEATURE:
     90 <223> OTHER INFORMATION: Synthetic test construct
     93 <220> FEATURE:
     94 <221> NAME/KEY: modified_base
     95 <222> LOCATION: (1)..(7)
     96 <223> OTHER INFORMATION: Entire sequence is Pyranosyl RNA
     99 <220> FEATURE:
     100 <221> NAME/KEY: modified_base
     101 <222> LOCATION: (1)..(1)
     102 <223> OTHER INFORMATION: Base 1 is modified with Cyanine-3 flourescent dye
     105 <220> FEATURE:
     106 <221> NAME/KEY: modified_base
     107 <222> LOCATION: (7)..(7)
                                                              n can only represend a single nucleation, base at any single location

EYI tryptamine is an
     108 <223> OTHER INFORMATION: (Base 7 is tryptamine
                                     ··········
     111 <400> SEQUENCE: 3
W--> 112 cgggggn Errored
     115 <210> SEQ ID NO: 4
     116 <211> LENGTH: 7
     117 <212> TYPE: DNA
     118 <213> ORGANISM: Artificial Sequence
     120 <220> FEATURE:
     121 <223> OTHER INFORMATION: Synthetic test construct
     124 <220> FEATURE:
     125 <221> NAME/KEY: modified_base
     126 <222> LOCATION: (1)..(7)
     127 <223> OTHER INFORMATION: Entire sequence is Pyranosyl RNA
     130 <220> FEATURE:
     131 <221> NAME/KEY: modified_base
     132 <222> LOCATION: (3)..(3)
     133 <223> OTHER INFORMATION: Base 3 is tryptamine
     136 <220> FEATURE:
     137 <221> NAME/KEY: modified_base
     138 <222> LOCATION: (4) ... (4)
     139 <223> OTHER INFORMATION: Base 4 is tryptamine
     142 <220> FEATURE:
     143 <221> NAME/KEY: modified_base
```

The type of errors shown exist throughout the Sequence Listing. Please check subsequent, sequences for similar errors.

144 <222> LOCATION: (5)..(5)

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/374,338B

DATE: 08/23/2001 TIME: 13:24:31

Input Set : A:\ES.txt

Output Set: N:\CRF3\08162001\1374338B.raw

145 <223> OTHER INFORMATION: Base 5 is tryptamine 148 <400> SEQUENCE: 4 W-->, 149 ccnnngg 152 <210> SEQ ID NO: 5 153 <211> LENGTH: 7 154 <212> TYPE: DNA 155 <213> ORGANISM: Artificial Sequence 157 <220> FEATURE: 158 <223> OTHER INFORMATION: Synthetic test construct 161 <220> FEATURE: 162 <221> NAME/KEY: modified_base 163 <222> LOCATION: (1)..(7) 164 <223> OTHER INFORMATION: Entire sequence is Pyranosyl RNA 167 <220> FEATURE: 168 <221> NAME/KEY: modified_base 169 <222> LOCATION: (1)..(1) 170 <223> OTHER INFORMATION: Base 1 modified with Fluorophore 173 <220> FEATURE: 174 <221> NAME/KEY: modified_base 175 <222> LOCATION: (7)..(7) 176 <223> OTHER INFORMATION: Base 7 modified with a Peptide 179 <220> FEATURE: 180 <221> NAME/KEY: modified_base 181 <222> LOCATION: (7)..(7) 182 <223> OTHER INFORMATION: Base 7 is tryptamine 185 <400> SEQUENCE: 5 w--> 186 cgggggh 189 <210> SEQ ID NO: 6 190 <211> LENGTH: 8 191 <212> TYPE: DNA 192 <213> ORGANISM: Artificial Sequence 194 <220> FEATURE: 195 <223> OTHER INFORMATION: Synthetic test construct 198 <220> FEATURE: 199 <221> NAME/KEY: modified_base 200 <222> LOCATION: (1)..(8) 201 <223> OTHER INFORMATION: Entire sequence is Pyranosyl RNA 204 <220> FEATURE: 205 <221> NAME/KEY: modified_base 206 <222> LOCATION: (1)..(1) 207 <223> OTHER INFORMATION: Base 1 modified with a Peptide 210 <220> FEATURE: 211 <221> NAME/KEY: modified_base 212 <222> LOCATION: (1)..(1) 213 <223> OTHER INFORMATION: Base 1 is tryptamine 216 <220> FEATURE: 217 <221> NAME/KEY: modified_base

219 <223> OTHER INFORMATION: Base 8 is any nucleotide CV

218 <222> LOCATION: (8)..(8)



RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/374,338B

DATE: 08/23/2001 TIME: 13:24:31

Input Set : A:\ES.txt

Output Set: N:\CRF3\08162001\1374338B.raw

```
222 <400> SEQUENCE: 6
w--> 223 (hgaagggfi)
    -226 <210> SEQ ID NO: 7
     227 <211> LENGTH: 14
     228 <212> TYPE: DNA
     229 <213> ORGANISM: Artificial Sequence
     231 <220> FEATURE:
     232 <223> OTHER INFORMATION: Synthetic test construct
     235 <220> FEATURE:
     236 <221> NAME/KEY: modified_base
     237 <222> LOCATION: (1)..(14)
     238 <223> OTHER INFORMATION: Entire sequence is Pyranosyl RNA
     241 <220> FEATURE:
     242 <221> NAME/KEY: modified_base
     243 <222> LOCATION: (1)..(1)
     244 <223> OTHER INFORMATION: Base 1 modified with Biotin
     247 <220> FEATURE:
     248 <221> NAME/KEY: modified_base
     249 <222> LOCATION: (7)...(7)
     250 <223> OTHER INFORMATION: Base 7 is tryptamine
     253 <220> FEATURE:
     254 <221> NAME/KEY: modified_base
     255 <222> LOCATION: (7)..(8)
     256 <223> OTHER INFORMATION: Bases 7 and 8 are modified by Peptide connection.
     259 <400> SEQUENCE: 7
                                                                                14
 --> 260 cccttcntcc cccg
     263 <210> SEQ ID NO: 8
     264 <211> LENGTH: 6
     265 <212> TYPE: PRT
     266 <213> ORGANISM: Artificial Sequence
     268 <220> FEATURE:
     269 <223> OTHER INFORMATION: Synthetic test construct
     272 <220> FEATURE:
     273 <221> NAME/KEY: PEPTIDE
     274 <222> LOCATION: (1)..(1)
     275 <223> OTHER INFORMATION: 1st amino acid is modified with pyranosyl RNA
     278 <400> SEQUENCE: 8
     280 Cys Leu Ser Leu Glu Gly
     281 1
     283 <210> SEQ ID NO: 9
     284 <211> LENGTH: 6
     285 <212> TYPE: PRT
     286 <213> ORGANISM: Artificial Sequence \sim
     288_<220>_FEATURE:_______
     289 <223> OTHER INFORMATION: Synthetic test construct
     292 <220> FEATURE:
     293 <221> NAME/KEY: PEPTIDE
     294 <222> LOCATION: (1)..(1)
     295 <223> OTHER INFORMATION: 1st amino acid is modified with pyranosyl RNA
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/374,338B

DATE: 08/23/2001 TIME: 13:24:31

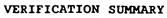
Input Set : A:\ES.txt

Output Set: N:\CRF3\08162001\I374338B.raw

```
298 <400> SEQUENCE: 9
 300 Cys Ser Leu Glu Ser Gly
. 301 1
 303 <210> SEQ ID NO: 10
 304 <211> LENGTH: 6
 305 <212> TYPE: PRT
 306 <213> ORGANISM: Artificial Sequence
 308 <220> FEATURE:
 309 <223> OTHER INFORMATION: Synthetic test construct
 312 <220> FEATURE:
 313 <221> NAME/KEY: PEPTIDE
 314 <222> LOCATION: (1)..(1)
 315 <223> OTHER INFORMATION: 1st amino acid is modified with pyranosyl RNA
 318 <400> SEQUENCE: 10-
 320 Cys Leu Leu Ser Glu Gly
 321 1
 323 <210> SEQ ID NO: 11
 324 <211> LENGTH: 6
 325 <212> TYPE: PRT
 326 <213> ORGANISM: Artificial Sequence
 328 <220> FEATURE:
 329 <223> OTHER INFORMATION: Synthetic test construct igcup
 332 <220> FEATURE:
 333 <221> NAME/KEY: PEPTIDE
 334 <222> LOCATION: (1)..(1)
 335 <223> OTHER INFORMATION: 1st amino acid is modified with pyranosyl RNA
 338 <400> SEQUENCE: 11
 340 Cys Ser Arg Ser Arg Gly
 343 <210> SEQ ID NO: 12
 344 <211> LENGTH: 6
 345 <212> TYPE: PRT
 346 <213> ORGANISM: Artificial Sequence
 348 <220> FEATURE:
 349 <223> OTHER INFORMATION: Synthetic test construct
 352 <220> FEATURE:
 353 <221> NAME/KEY: PEPTIDE
 354 <222> LOCATION: (1)..(1)
 355 <223> OTHER INFORMATION: 1st amino acid is modified with pyranosyl RNA
 358 <400> SEQUENCE: 12
 360 Cys Ser Arg His Arg Gly
 361 1
 363 <210> SEQ ID NO: 13
364- <211>-LENGTH:--6
 365 <212> TYPE: PRT
 366 <213> ORGANISM: Artificial Sequence
 368 <220> FEATURE:
```

372 <220> FEATURE:

369 <223> OTHER INFORMATION: Synthetic test construct



PATENT APPLICATION: US/09/374,338B

DATE: 08/23/2001 TIME: 13:24:32

Input Set : A:\ES.txt

Output Set: N:\CRF3\08162001\1374338B.raw

L:51 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:81 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 L:112 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 L:149 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 L:186 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 L:223 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 L:260 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 L:424 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 L:455 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 L:486 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 L:523 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18-L:560 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 L:599 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 L:624 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 L:649 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 L:707 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 L:738 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 L:769 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 L:825 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 L:856 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31